abcam

Product datasheet

Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] ab76114



3 Images

Overview

Product name Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y]

Description Rabbit monoclonal [EP2613Y] to Presenilin 2/AD5 (phospho S327)

Host species Rabbit

Tested applications Suitable for: Dot blot, WB **Species reactivity** Reacts with: Mouse, Human

Predicted to work with: Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Hela whole cell lysate; RAW 264.7 whole cell lysate

General notes This product has switched from a hybridoma to recombinant production method on 18th

September 2023

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EP2613Y

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab76114 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes	
Dot blot		1/1000.	
WB		1/500. Detects a band of approximately 23 kDa (predicted molecular weight: 50 kDa). Use at 1/1000 to 1/5000 for unpurified version	

Function

Probable catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). Requires the other members of the gamma-secretase complex to have a protease activity. May play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. May function in the cytoplasmic partitioning of proteins.

Tissue specificity

lsoform 1 is seen in the placenta, skeletal muscle and heart while isoform 2 is seen in the heart, brain, placenta, liver, skeletal muscle and kidney.

Involvement in disease

Defects in PSEN2 are the cause of Alzheimer disease type 4 (AD4) [MIM:606889]. AD is an autosomal dominant Alzheimer disease. Alzheimer disease is a neurodegenerative disorder characterized by progressive dementia, loss of cognitive abilities, and deposition of fibrillar amyloid proteins as intraneuronal neurofibrillary tangles, extracellular amyloid plaques and vascular amyloid deposits. The major constituent of these plaques is the neurotoxic amyloid-beta-APP 40-42 peptide (s), derived proteolytically from the transmembrane precursor protein APP by sequential secretase processing. The cytotoxic C-terminal fragments (CTFs) and the caspase-cleaved products such as C31 derived from APP, are also implicated in neuronal death. Defects in PSEN2 are the cause of cardiomyopathy dilated type 1V (CMD1V) [MIM:613697]. It is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

Sequence similarities

Belongs to the peptidase A22A family.

Domain

The PAL motif is required for normal active site conformation.

Post-translational modifications

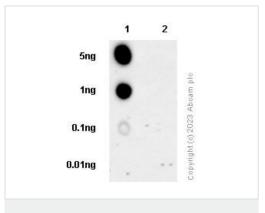
Heterogeneous proteolytic processing generates N-terminal and C-terminal fragments.

Phosphorylated on serine residues.

Cellular localization

Endoplasmic reticulum membrane. Golgi apparatus membrane.

Images



Dot Blot - Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] (ab76114)

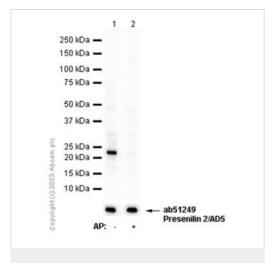
Dot blot analysis labelling Presenilin 2/AD5 (phospho S327) with ab76114 at 1/500 dilution. Lane 1: Presenilin 2/AD5 (phospho S327) peptide

Lane 2: Presenilin 2/AD5 non-phospho peptide

A peroxidase-conjugated goat anti-rabbit IgG (H+L) (ab97051) was used as the secondary antibody at a dilution of 1/100,000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 180s.



Western blot - Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] (ab76114)

All lanes: Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] (ab76114) at 1/500 dilution

Lane 1: RAW 264.7 (Mouse Abelson murine leukemia virusinduced tumor macrophage) whole cell lysate

Lane 2: RAW 264.7 (Mouse Abelson murine leukemia virusinduced tumor macrophage) whole cell lysate. Then the membrane was incubated with alkaline phosphatase

Lysates/proteins at 15 µg per lane.

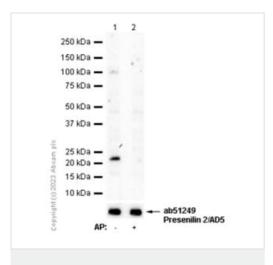
Predicted band size: 50 kDa

Exposure time: 80 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST,

Primary antibody: incubated for 1h at room temperature.

Secondary antibody: incubated for 1h at 1:20,000 at room temperature (ab97051); incubated for 1h at 1:2000 at room temperature (Goat Anti-Rabbit IgG (HRP) with minimal crossreactivity with human IgG)



Western blot - Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] (ab76114)

All lanes : Anti-Presenilin 2/AD5 (phospho S327) antibody [EP2613Y] (ab76114) at 1/500 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate. Then the membrane was incubated with alkaline phosphatase

Lysates/proteins at 15 µg per lane.

Predicted band size: 50 kDa

Exposure time: 180 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST,

Primary antibody: incubated for 1h at room temperature.

Secondary antibody: incubated for 1h at 1:20,000 at room temperature (ab97051); incubated for 1h at 1:2000 at room temperature (Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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